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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/786,466

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EXAMINER

CHAPMAN, JEANETTE E

ART UNIT

PAPER NUMBER

3633

MAIL DATE

DELIVERY MODE

06/22/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/786,466	Applicant(s) SMITH, IVAN THRALL	
	Examiner Jeanette E. Chapman	Art Unit 3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-18, 20, 25-27, 29-41, 43 and 48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-18, 20, 25-27, 29-41, 43, 48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-18, 20, 25-27, 29-41, 43, 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gebhardt et al (4464877) in view of Mulford (4658557) and ASTM E119-95a "Fire Test of Building Construction and Materials Limited Load Conditions (2 x 4 Wood Double Leaf Wall) project no. 15746-101913 (dated 9/1997)

Gebhardt et al discloses the first and second multi-level building units of occupiable space such as a residential duplex or two unit / home with a two hour first resistance fire rated area separation wall and a thermal insulation layer between the layers of the separation wall; see column 6, lines 26-42 and column 8, lines 59-64.

ASTM discloses a fire rated wall construction shown in figure 1 having an area separation wall having outer membranes of gypsum board of a single sheet of fire resistant wallboard and cellulose insulation between the outer membranes. The separation wall further includes a tying structure constructed of wood of the horizontal "2x4" studs shown in figure 1 and section B-B, page 18, for connecting said fire resistance rated, area separation wall (frrasw) to possible first and second building units as those shown by Gebhardt

Mulford discloses a fire rated wall construction having a sheathing fire rated panels 56/58, studs 40 and insulation 48 between the sheathing and the studs. Mulford further discloses a tying structure 30 possibly connecting the separation wall first and second units such as those suggested by Gebhardt. The tying structure may include a double plate assembly as shown in figure 5 with element 30 whereby the following modification for figures 6-8 includes a top plate 30 attached to the top edge of the fire resistance rated, area separation wall (frrasw) and a bottom plate 44 attached to the bottom edge of the frrasw. See figures 7 and 8 and corresponding text. The plates are less than 10 feet apart.

Gebhardt discloses that at least a two inch thick gypsum non-bearing partition will meet the requirements of a two hour fire resistance rating. Gebhardt disclose the unit is an occupiable residential townhouse space.

Mulford discloses an interior support structure.

Mulford discloses structurally independent interior vertical (wallboard panel) support members 46 and 50 constructed of wood. The vertical members are spaced apart. The spacing has been considered a matter of choice depending on the other function characteristics to be imparted in the wall structure. The vertical members include cross bracing 22 at about mid-height of the plurality of vertical members. Mulford discloses the vertical members are spaced apart. The spacing has been considered a matter of

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choice depending on the other function characteristics to be imparted in the wall structure. The vertical members include cross bracing 22 at about mid-height of the plurality of vertical members. Mulford discloses a bottom plate attached to the bottom edge of the wall. The double top plate and said bottom plate are separated but the distance of separation is not critical but dependent on the height of the building

ASTM discloses structurally independent vertical wall board panel support member (see studs at 16" O.C in figure 1 and ASTM discloses physical gap between said structurally independent interior support members. See figure 1 of ASTM. Stucco or paint may come in a fire resistant wallboard. One of ordinary skill in the art would have appreciated the type of wallboard commensurate with the intended function and purpose of the support structure.

ASTM discloses organic thermal insulation is used for excellent insulation, mechanical strength and flame resistance. The type of organic thermal insulation has been considered a matter of choice; the selection of any one type has not been viewed as critical. No criticality has been shown for using any one type. One of ordinary skill in the art would have appreciated using any type commensurate with the intended function and purpose of the separation wall.

ASTM also discloses "The methods may be cited as the "Standard Fire Tests," and the performance or exposure shall be expressed as "2 h", "6h", 1/2h" etc....

When a factor of safety exceeding that inherent in the test conditions is desired, a proportional increase should be made in the specified time-classification period. The ASTM E119 test procedure is identical or very similar to the following standard test methods:

.UL 263

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UBC 43-1

NFPA 251

ANSI A2.1

1. Scope

1.1 These methods are applicable to assemblies of masonry units and to composite assemblies of structural materials for buildings, including bearing and other walls and partitions, columns, girders, beams, slabs, and composite slab and beam assemblies for floors and roofs. They are also applicable to other assemblies and structural units that constitute permanent integral parts of a finished building, ASTM discloses thermal insulation between outer membranes." (dated 9/1997)

One of ordinary skill in the art would have appreciated constructing an area separation wall with a fire resistance rating according to ASTM, incorporation of UL 263 as shown above; further, in view of the above, it would have been obvious to use the separation wall between the two building units having a two hour fire resistance with a tying structure between the two unit separation walls to provide an effective separation wall as shown by Mulford and ASTM.

Applicant's arguments have been considered but are not persuasive.

Applicant argues, "Gebhardt is directed to what is commonly referred to as "party walls" - see e.g. Fig. 9. Such walls are non-load bearing as is the present inventions (see e.g. Figs. 2 and 3 of the present application) and, in fact, the walls of the reference are factory assembled and shipped to the building site"...

The walls of Gebhardt also are formed from "sheet metal channels and two layers of gypsum board applied on each side of the frame" see, e.g., Fig. 18 and col. 2, lines 37-40. In addition, the insulation material is an acoustic insulation (typical for "party walls") which is typically fiberglass insulation batts as set forth, for example, at col. 6, lines 10-

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13. Thus, it is not an organic thermal insulation barrier as recited in the claims of the present inventions.

Response: Independent claims do not recite the separation walls being load bearing of non-load bearing. Gebhardt has not been considered alone to meet the limitations of the claims. The secondary references are cited to show variations in the area separation wall; motivation statements are given to provide a reason why one of ordinary skill in the art would combine references.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeanette E. Chapman whose telephone number is 571-272-6841. The examiner can normally be reached on Mon.-thursday, 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeanette E Chapman/
Primary Examiner, Art Unit 3633